

In the Claims:

Please cancel claims 7-12 and 14-20, without prejudice, amend claims 1-2, 4 and 13, and add new claims 21-23 as follows:

Sub B1
1. (Currently Amended) A layered polycrystalline structure

comprising:

a seed crystal layer containing a non-magnetic element at a first concentration

level;

AD a magnetic crystal layer containing a non-magnetic element ~~diffused~~diffusing

along a grain boundary; and

a non-magnetic crystal layer interposed between the seed crystal layer and the

magnetic crystal layer, said non-magnetic crystal layer containing a non-magnetic element at

a second concentration level smaller than the first concentration level.

2. (Currently Amended) A layered polycrystalline structure

comprising:

a seed crystal layer containing Cr atoms at a first concentration level equal to or

larger than 50at%;

a Co-based alloy magnetic crystal layer containing Cr atoms ~~diffused~~diffusing

along a grain boundary; and

a Co-based alloy non-magnetic crystal layer interposed between the seed crystal layer and the Co-based alloy magnetic crystal layer, said Co-based alloy non-magnetic crystal layer containing Cr atoms at a second concentration level smaller than the first concentration level.

3. (Original) The layered polycrystalline structure according to claim 2, wherein said seed crystal layer is a pure Cr layer.

4. (Currently Amended) A magnetic recording medium comprising:
a substrate;
a seed crystal layer formed on a surface of the substrate and containing a non-magnetic element at a first concentration level;
a magnetic crystal layer containing a non-magnetic element diffuseddiffusing along a grain boundary; and
a non-magnetic crystal layer interposed between the seed crystal layer and the magnetic crystal layer, said non-magnetic crystal layer containing a non-magnetic element at a second concentration level smaller than the first concentration level.

5. (Original) The magnetic recording medium according to claim 4, wherein an amorphous layer is defined along the surface of the substrate.

6. (Original) The magnetic recording medium according to claim 4, wherein a Ti layer is defined along the surface of the substrate.

B.1
A.2
7-12. (Canceled)

13. (Currently Amended) A layered polycrystalline structure comprising:

amorphous nucleation sites sparsely existing on ~~over~~ a surface of a substrate at positions spaced from each other, each of said amorphous nucleation sites being made of an aggregation of predetermined atoms; and

a crystal layer covering over the surface of the substrate and containing crystal grains growing from the nucleation sites.

14-20. (Canceled).

21. (New) The layered polycrystalline structure according to claim 1, wherein the magnetic crystal layer contains grains having sizes equal to corresponding grains in the non-magnetic crystal layer.

22. (New) The layered polycrystalline structure according to claim 1,

wherein the non-magnetic crystal layer has an epitaxial relationship to the seed crystal layer,
the magnetic crystal layer having an epitaxial relationship to the non-magnetic crystal layer.

23. (New) The layered polycrystalline structure according to claim 13,

wherein at least the surface of the substrate is amorphous.